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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,418

07/07/2005

Klaus Krejci

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8962

21874

7590

07/01/2009

EDWARDS ANGELL PALMER & DODGE LLP

P.O. BOX 55874

BOSTON, MA 02205

EXAMINER

YOUNG, NATASHA E

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/521,418	<b>Applicant(s)</b> KREJCI ET AL.	
	<b>Examiner</b> NATASHA YOUNG	<b>Art Unit</b> 1797	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-18 and 20-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15, 17, 21-31 and 36-42 is/are allowed.
- 6) ☒ Claim(s) 16, 18, 20 and 32-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16, 18, 20, and 32-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 16, 18, 20, and 32-35 are incorrect for the following reasons. Claim 15 discloses a gas-swirling means comprising at least one bead. Claims 16 and 18 depend on claim 15. The bead is used to narrow the pipe lumen such it is not possible to widen the pipe lumen as claimed in claim 16. Because claim 15 cites that the gas-swirling means is positioned at the mouth of the gas inlet pipe, the examiner believes it is not possible to have a gas-swirling means comprise at least one bead and further comprising any additional features such as a thread (claims 18 and 34), at least one screen, at least one turbulence grid and/or at least one perforated diaphragm (claim 20), at least one narrowing or widening of the pipe lumen (claim 32) and the narrowing has at least one edge (claim 33), and at least one bead (claim 35) at the mouth of the gas inlet pipe.

### ***Allowable Subject Matter***

Claims 15, 17, 21-31, and 36-42 are allowed.

The prior art references do not disclose the claimed inventions.

Regarding claim 15, Grabenhorst et al discloses a device for introducing gas into a fluidized bed comprising at least one gas inlet pipe located underneath and/or above the fluidized bed, wherein the gas inlet pipe has gas-swirling means at its mouth (see Abstract; specification; and figure 1).

The prior art reference does not disclose or suggest a device wherein the gas-swirling means comprise at least one bead.

Regarding claim 23, Bagley et al discloses that it is known to have a device wherein the gas comprises ethane, oxygen and/or hydrogen chloride and a fluidized reactor bed comprising holes in a plate or plates may be equipped with caps, bubble caps, risers and tuyer or distributors, ball-check valves (see column 1, line 18 through column 2, line 32) and a process for the production of chlorinated hydrocarbon with a fluidized bed reactor comprising a device for introducing gas, the method comprising: introducing hydrocarbon, oxygen and/or hydrogen chloride into a fluidized bed comprising a catalyst, wherein the device comprises at least one gas inlet pipe located underneath and/or above the fluidized bed (see Abstract; figures 1-2; column 1, lines 18-35; and column 2, lines 26-30).

Grabenhorst et al discloses a device for introducing gas into a fluidized bed (see Abstract) comprising: at least one gas inlet pipe located underneath and/or above the fluidized bed, wherein the gas inlet pipe has gas-swirling means at its mouth (see Abstract and figure 1).

Cowfer et al discloses the oxychlorination of ethylene to 1,2-dichloroethane and ethylene, oxygen, and HCL are introduced into a fluidized bed (see column 5, lines 46-59).

The prior art references do not disclose or suggest the gas-swirling means comprises at least one bead.

Regarding claim 31, Grabenhorst et al discloses a device for introducing gas into a fluidized bed comprising at least one gas inlet pipe located underneath and/or above the fluidized bed, wherein the gas inlet pipe has gas-swirling means at its mouth (see Abstract; specification; and figure 1).

The prior art reference does not disclose or suggest a device wherein the gas-swirling means comprise at least one screen, at least one turbulence grid and/or at least one perforated diaphragm.

Regarding claim 38, Bagley et al discloses that it is known to have a device wherein the gas comprises ethane, oxygen and/or hydrogen chloride and a fluidized reactor bed comprising holes in a plate or plates may be equipped with caps, bubble caps, risers and tuyer or distributors, ball-check valves (see column 1, line 18 through column 2, line 32) and a process for the production of chlorinated hydrocarbon with a fluidized bed reactor comprising a device for introducing gas, the method comprising: introducing hydrocarbon, oxygen and/or hydrogen chloride into a fluidized bed comprising a catalyst, wherein the device comprises at least one gas inlet pipe located underneath and/or above the fluidized bed (see Abstract; figures 1-2; column 1, lines 18-35; and column 2, lines 26-30).

Grabenhorst et al discloses a device for introducing gas into a fluidized bed (see Abstract) comprising: at least one gas inlet pipe located underneath and/or above the fluidized bed, wherein the gas inlet pipe has gas-swirling means at its mouth (see Abstract and figure 1).

Cowfer et al discloses the oxychlorination of ethylene to 1,2-dichloroethane and ethylene, oxygen, and HCL are introduced into a fluidized bed (see column 5, lines 46-59).

The prior art reference does not disclose or suggest a device wherein the gas-swirling means comprise at least one screen, at least one turbulence grid and/or at least one perforated diaphragm.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATASHA YOUNG whose telephone number is 571-270-3163. The examiner can normally be reached on Mon-Thurs 7:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. Y./  
Examiner, Art Unit 1797

/Walter D. Griffin/  
Supervisory Patent Examiner, Art Unit 1797